

IN THE CLAIMS:

Please amend Claims 1-3, 13-17, 19-21, 24, 26-29, 31, 34-36, 38, 41-43, and 45-56 as follows.

Further, please add new Claims 57-68.

1. (Currently Amended) A plasma treatment apparatus comprising:

a plasma generation unit comprising a first electrode provided on a first substrate and a plurality of second electrodes opposed to the first electrode and provided on a second substrate;

a gas supply unit adapted to ~~blow~~ discharge a process gas into a space between the first electrode and the plurality of second electrodes and onto a third substrate to be treated; and

~~a unit adapted to selectively apply a voltage to a selected electrode among the plurality of second electrodes,~~

a unit for controlling a voltage applied to a selected electrode among the plurality of second electrodes,

wherein the plurality of second electrodes are arranged linearly in one line, and

wherein the plasma generation unit is configured to ~~[[moved]]~~ move in an X direction and a Y direction.

2. (Currently Amended) A plasma treatment apparatus comprising:

a plasma generation unit comprising a first electrode provided on a first substrate and a plurality of second electrodes opposed to the first electrode and provided on a second substrate;

a gas supply unit adapted to ~~blow~~ discharge a process gas into a space between the first electrode and the plurality of second electrodes and onto on a third substrate to be treated; and

~~a unit adapted to selectively apply a voltage to a selected electrode among the plurality of second electrodes,~~

a unit for controlling a voltage applied to a selected electrode among the plurality of second electrodes,

wherein the plurality of second electrodes are arranged linearly in one line,

wherein at least one of the plurality of second electrodes has a length of equal to or less than 1 mm on a side of ~~an object~~ the third substrate to be treated,

wherein the first electrode and the plurality of second electrodes are arranged perpendicular to ~~a plane in which a subject substrate~~ the third substrate to be treated is disposed, and

wherein the plasma generation unit is configured to ~~[[moved]]~~ move in an X direction and a Y direction.

3. (Currently Amended) A plasma treatment apparatus comprising:

a plasma generation unit comprising a first electrode provided on a first substrate and a plurality of second electrodes opposed to the first electrode and provided on a second substrate, the plasma generation unit being adapted to form ~~[[forming]]~~ a pattern on ~~an object~~ a third substrate to be treated;

a gas supply unit adapted to ~~blow~~ discharge a process gas into a space between the first electrode and the plurality of second electrodes and onto the third substrate to be treated; and

~~a unit adapted to selectively apply a voltage to a selected electrode among the plurality of second electrodes,~~

a unit for controlling a voltage applied to a selected electrode among the plurality of second electrodes,

wherein the plurality of second electrodes are arranged linearly in one line,

wherein at least one of the plurality of second electrodes has a length of equal to or less than a square of a line width of the pattern on a side of ~~the object~~ the third substrate to be treated, ~~[[and]]~~

wherein the first electrode and the plurality of second electrodes are arranged perpendicular to ~~a plane in which a subject substrate~~ the third substrate to be treated is disposed, and

wherein the plasma generation unit is configured to ~~[[moved]]~~ move in an X direction and a Y direction.

4. (Original) A plasma treatment apparatus according to claim 3, wherein the pattern is a wiring pattern.

5-9. (Canceled)

10. (Previously Presented) A plasma treatment apparatus according to claim 1, wherein the plurality of second electrodes are processed by using a focused ion beam apparatus, photolithography, or a laser lithography apparatus.

11. (Previously Presented) A plasma treatment apparatus according to claim 2, wherein the plurality of second electrodes are processed by using a focused ion beam apparatus, photolithography, or a laser lithography apparatus.

12. (Previously Presented) A plasma treatment apparatus according to claim 3, wherein the plurality of second electrodes are processed by using a focused ion beam apparatus, photolithography, or a laser lithography apparatus.

13. (Currently Amended) A plasma treatment apparatus according to claim 1, wherein the first electrode and the plurality of second electrodes are covered with a dielectric film.

14. (Currently Amended) A plasma treatment apparatus according to claim 2, wherein the first electrode and the plurality of second electrodes are covered with a dielectric film.

15. (Currently Amended) A plasma treatment apparatus according to claim 3, wherein the first electrode and the plurality of second electrodes are covered with a dielectric film.

16. (Currently Amended) A plasma treatment apparatus according to claim 1, wherein the voltage is applied to the predetermined electrode for performing a film formation, an etching treatment, or a surface modification over ~~an object~~ the third substrate to be treated.

17. (Currently Amended) A plasma treatment apparatus according to claim 2, wherein the voltage is applied to the predetermined electrode for performing a film formation, an etching treatment, or a surface modification over ~~an object~~ the third substrate to be treated.

18. (Previously Presented) A plasma treatment apparatus according to claim 3, wherein the forming of the pattern is performed under atmospheric pressure or under pressure approximate to atmospheric pressure.

19. (Currently Amended) A plasma treatment apparatus according to claim 1 further comprising a stage to which ~~an object~~ the third substrate to be treated is fixed, wherein a scanning of the stage is synchronized with the application of the voltage to the predetermined electrode.

20. (Currently Amended) A plasma treatment apparatus according to claim 2 further comprising a stage to which ~~the object~~ the third substrate to be treated is fixed, wherein a scanning of the stage is synchronized with the application of the voltage to the predetermined electrode.

21. (Currently Amended) A plasma treatment apparatus according to claim 3 further comprising a stage to which ~~the object~~ the third substrate to be treated is fixed, wherein a scanning of the stage is synchronized with the application of the voltage to the predetermined electrode.

22. (Previously Presented) A plasma treatment apparatus according to claim 16, wherein the film formation, the etching treatment, or the surface modification is performed under atmospheric pressure or under pressure approximate to atmospheric pressure.

23. (Previously Presented) A plasma treatment apparatus according to claim 17, wherein the film formation, the etching treatment, or the surface modification is performed under atmospheric pressure or under pressure approximate to atmospheric pressure.

24. (Withdrawn/Currently Amended) A plasma treatment apparatus comprising:
a plurality of plasma generation units each comprising a first electrode provided on a first substrate and a second electrode provided on a second substrate;

a gas supply unit adapted to ~~blow~~ discharge a process gas into a space between the first electrode and the plurality of second electrodes and onto a third substrate to be treated; and

~~a unit adapted to selectively apply a voltage to at least one electrode among the second electrodes,~~

a unit for controlling a voltage applied to a selected electrode among the plurality of second electrodes,

wherein the plurality of plasma generation units are arranged linearly in one line, and

wherein the first electrode and the second electrode are arranged perpendicular to ~~a subject substrate~~ the third substrate to be treated.

25. (Withdrawn) A plasma treatment apparatus according to claim 24,

wherein a relatively scanning of the plurality of plasma generation units is synchronized with the application of the voltage to the predetermined electrode.

26. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 24, wherein the ~~plurality of second electrodes are~~ electrode is processed by using a focused ion beam apparatus, photolithography, or a laser lithography apparatus.

27. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 24, wherein the first electrode and the plurality of second electrodes are covered with a dielectric film.

28. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 24, wherein the voltage is applied to the predetermined electrode for performing a film formation, an etching treatment , or a surface modification over ~~an object~~ the third substrate to be treated.

29. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 24 further comprising a stage to which ~~an object~~ the third substrate to be treated is fixed,

wherein a scanning of the stage is synchronized with the application of the voltage to the predetermined electrode.

30. (Withdrawn) A plasma treatment apparatus according to claim 28, wherein the film formation, the etching treatment, or the surface modification is performed under atmospheric pressure or under pressure approximate to atmospheric pressure.

31. (Withdrawn/Currently Amended) A plasma treatment apparatus comprising:
a plasma generation unit comprising a first electrode provided on a first substrate and a plurality of second electrodes provided on a second substrate opposed to the first electrode;
a gas supply unit adapted to ~~blow~~ discharge a process gas ~~to~~ into a space between the first electrode and the plurality of second electrodes and onto a third substrate to be treated through a space between the first electrode and the plurality of second electrodes; and
~~a unit adapted to selectively apply a voltage to at least one electrode among the plurality of second electrodes,~~
a unit for controlling a voltage applied to a selected electrode among the plurality of second electrodes,
wherein the plurality of second electrodes are arranged linearly in one line, and
wherein the first electrode and the plurality of second electrodes are arranged perpendicular to ~~a subject~~ the third substrate to be treated.

32. (Canceled)

33. (Withdrawn) A plasma treatment apparatus according to claim 31, wherein the plurality of second electrodes are processed by using a focused ion beam apparatus, photolithography, or a laser lithography apparatus.

34. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 31, wherein the first electrode and the plurality of second electrodes are covered with a dielectric film.

35. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 31, wherein the voltage is applied to the predetermined electrode for performing a film formation, an etching treatment, or a surface modification over ~~an object~~ the third substrate to be treated.

36. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 31 further comprising a stage to which ~~an object~~ the third substrate to be treated is fixed,

wherein a scanning of the stage is synchronized with the application of the voltage to the predetermined electrode.

37. (Withdrawn) A plasma treatment apparatus according to claim 35, wherein the film formation, the etching treatment, or the surface modification is performed under atmospheric pressure or under pressure approximate to atmospheric pressure.

38. (Withdrawn/Currently Amended) A plasma treatment apparatus comprising:
a plasma generation unit comprising a first electrode provided on a first substrate and a plurality of second electrodes provided on a second substrate opposed to the first electrode;
a gas supply unit adapted to ~~blow~~ discharge a process gas into a space between the first electrode and the plurality of second electrodes and onto a third substrate to be treated through a first space and a second space continuously, the first space being between the first electrode and ~~[[a]]~~ the third substrate and the second space being between the plurality of second electrodes and the third substrate; and
~~a unit adapted to selectively apply a voltage to at least one electrode among the plurality of second electrodes,~~
a unit for controlling a voltage applied to a selected electrode among the plurality of second electrodes,
wherein the plurality of second electrodes are arranged linearly in one line, and
wherein the first electrode and the plurality of second electrodes are arranged perpendicular to ~~a subject substrate~~ the third substrate to be treated.

39. (Canceled)

40. (Withdrawn) A plasma treatment apparatus according to claim 38, wherein the plurality of second electrodes are processed by using a focused ion beam apparatus, photolithography, or a laser lithography apparatus.

41. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 38, wherein the first electrode and the plurality of second electrodes are covered with a dielectric film.

42. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 38, wherein the voltage is applied to the predetermined electrode for performing a film formation, an etching treatment, or a surface modification over ~~an object~~ the third substrate to be treated.

43. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 38 further comprising a stage to which ~~an object~~ the third substrate to be treated is fixed,

wherein a scanning of the stage is synchronized with the application of the voltage to the predetermined electrode.

44. (Withdrawn) A plasma treatment apparatus according to claim 42, wherein the film formation, the etching treatment, or the surface modification is performed under atmospheric pressure or under pressure approximate to atmospheric pressure.

45. (Currently Amended) A plasma treatment apparatus according to claim 1, wherein the ~~blown~~ discharged process gas acts on ~~the subject substrate~~ the third substrate to be treated.

46. (Currently Amended) A plasma treatment apparatus according to claim 2, wherein the ~~blown~~ discharged process gas acts on ~~the subject substrate~~ the third substrate to be treated.

47. (Currently Amended) A plasma treatment apparatus according to claim 3, wherein the ~~blown~~ discharged process gas acts on ~~the subject substrate~~ the third substrate to be treated.

48. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 24, wherein the ~~blown~~ discharged process gas acts on ~~the subject substrate~~ the third substrate to be treated.

49. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 31, wherein the ~~blown~~ discharged process gas acts on ~~the subject substrate~~ the third substrate to be treated.

50. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 38, wherein the ~~blown~~ discharged process gas acts on ~~the subject substrate~~ the third substrate to be treated.

51. (Currently Amended) A plasma treatment apparatus according to claim 1, wherein the plasma generation unit is adapted for movement in an X direction and a Y direction relative to the position of ~~the subject substrate~~ the third substrate to be treated.

52. (Currently Amended) A plasma treatment apparatus according to claim 2, wherein the plasma generation unit is adapted for movement in an X direction and a Y direction relative to the position of ~~the subject substrate~~ the third substrate to be treated.

53. (Currently Amended) A plasma treatment apparatus according to claim 3, wherein the plasma generation unit is adapted for movement in an X direction and a Y direction relative to the position of ~~the subject substrate~~ the third substrate to be treated.

54. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 24, wherein the plasma generation units are adapted for movement in an X direction and a Y direction relative to the position of ~~the subject substrate~~ the third substrate to be treated.

55. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 31, wherein the plasma generation unit is adapted for movement in an X direction and a Y direction relative to the position of ~~the subject substrate~~ the third substrate to be treated.

56. (Withdrawn/Currently Amended) A plasma treatment apparatus according to claim 38, wherein the plasma generation unit is adapted for movement in an X direction and a Y direction relative to the position of ~~the subject substrate~~ the third substrate to be treated.

57. (New) A plasma treatment apparatus of claim 1, wherein a plurality of first electrodes are formed on the first substrate.

58. (New) A plasma treatment apparatus of claim 1, wherein the first substrate and second substrate comprise a non-conductive material.

59. (New) A plasma treatment apparatus of claim 2, wherein a plurality of first electrodes are formed on the first substrate.

60. (New) A plasma treatment apparatus of claim 2, wherein the first substrate and second substrate comprise a non-conductive material.

61. (New) A plasma treatment apparatus of claim 3, wherein a plurality of first electrodes are formed on the first substrate.

62. (New) A plasma treatment apparatus of claim 3, wherein the first substrate and second substrate comprise a non-conductive material.

63. (New) A plasma treatment apparatus of claim 24, wherein a plurality of first electrodes are formed on the first substrate.

64. (New) A plasma treatment apparatus of claim 24, wherein the first and second substrates comprise a non-conductive material.

65. (New) A plasma treatment apparatus of claim 31, wherein a plurality of first electrodes are formed on the first substrate.

66. (New) A plasma treatment apparatus of claim 31, wherein the first and second substrates comprise a non-conductive material.

67. (New) A plasma treatment apparatus of claim 38, wherein a plurality of first electrodes are formed on the first substrate.

68. (New) A plasma treatment apparatus of claim 38, wherein the first and second substrates comprise a non-conductive material.